USDA United States Department of Agriculture | Forest Service | Three Rivers Ranger District | 255 W. 11th Avenue Kettle Falls, WA 99141 509-738-7700

File Code: 1950
Date: July 28, 2016

Decision Memo
Second Creek Post Fire Recovery CE
Colville National Forest, Ferry County, Washington

Decision

It is my decision to proceed with the Post Fire Recovery CE Project. This project would harvest dead and dying merchantable fire-killed trees on less than 250 acres north of the Boulder-Deer Highway and southwest of Rocky Mountain. Units in this project are roughly 50 year old plantations with a mix of species. These units were originally planned as part of the Deer Jasper EA, but after burning at nearly 100% mortality, they were excluded from treatment. This project seeks to test different post fire restoration techniques, provide products to local mills, and serve as an opportunity for continued study of post fire restoration. The Northeast Washington Forestry Coalition, along with industry and researchers are using this project as an opportunity to study post fire treatments, in a replicated study with control plots. Study topics may include fuel buildup over time, regeneration density over time, snag decay and fall rates, soil disturbance and compaction, microclimate and snow retention.

Trees would be harvested using ground based logging equipment. Existing skid trails will be used when feasible. In addition, understory non-merchantable trees would be whip felled or thinned. Slash will be treated by mechanical piling and burning, yarding tops to landings, mastication, or by other means such as biomass removal. After the slash disposal is complete, planting would occur where activities have created openings.

Two different treatments would be applied:

- Apply normal green tree restoration prescriptions aimed at retaining roughly 40 trees per acre, to address departure from historic or reference conditions. This treatment would be a variable thinning through fire-killed trees.
- Remove dead trees leaving 10% of the area in ¼ to 1 acre no cut skips.

The Stickpin Fire burned nearly 49,000 acres on the Colville National Forest. In addition to providing value to ongoing research, this stand, would serve as a demonstration of areas of agreement around post fire treatment. Field trips and post treatment mulit-party monitoring would further our understanding of the social and political opportunities and challenges of treating after a wildfire event. Shared discussions and learning that arise from field trips to the area may inform future management decisions.

The project is located in Ferry County, Washington, in the West Deer Creek Watershed. Treatment units lie between the towns of Curlew and Orient, about a mile north of the Boulder-Deer Highway (FS 6110),

west of the Kettle Crest summit. The legal description is T 39N R 35E Sections 7 and 16 WM, Washington (see attached map).

Design Elements

Fuels

1. Post-harvest fuels surveys will be conducted to determine if additional treatment is necessary. Reference "Photo Guide for Appraising Downed Woody Fuels in Montana Forests (GTR-INT-97). If surface fuel loadings exceed levels defined in the GTR-INT-97 photo series guide, then machine piling would be recommended to meet acceptable surface fuel loadings.

Hydrology

Site specific exceptions may be made to the following design criteria with consultation with a hydrologist or fisheries biologist:

2. No treatment would occur inside Riparian Habitat Conservation Areas (RHCAs)
3. No tracked or wheeled equipment within RHCAs
4. Locate piles outside of RHCAs

Site specific widths may be increased where necessary to achieve riparian management goals and objectives or decreased where widths are not needed to attain Riparian Management Objectives or avoid adverse effects to inland native species (INFISH, 1995). The default RHCA widths are:

Category 1 - Fish-bearing streams (Class 1 and 2): Interim RHCAs consist of the stream and the area on either side of the stream extending from the edges of the active stream channel to the top of the inner gorge, or to the outer edges of the 100-year floodplain, or to the outer edges of riparian vegetation, or to a distance equal to the height of two site-potential trees, or 300 feet slope distance (600 feet, including both sides of the stream channel), whichever is greatest.

Category 2 - Permanently flowing non-fish-bearing streams (Class 3): Interim RHCAs consist of the stream and the area on either side of the stream extending from the edges of the active stream channel to the top of the inner gorge, or to the outer edges of the 100-year flood plain, or to the outer edges of riparian vegetation, or to a distance equal to the height of one site-potential tree, or 150 feet slope distance (300 feet, including both sides of the stream channel), whichever is greatest.

Category 3 - Ponds, lakes, reservoirs, and wetlands greater than 1 acre: Interim RHCAs consist of the body of water or wetland and the area to the outer edges of the riparian vegetation, or to the extent of the seasonally saturated soil, or to the extent of moderately and highly unstable areas, or to a distance equal to the height of one site-potential tree, or 150 feet slope distance from the edge of the maximum pool elevation of constructed ponds and reservoirs or from the edge of the wetland, pond or lake, whichever is greatest.

Category 4 - Seasonally flowing or intermittent streams, wetlands less than 1 acre, landslides, and landslide-prone areas (Class 4): This category includes features with high variability in size and site-specific characteristics. At a minimum the interim RHCAs must include:

a. the extent of landslides and landslide-prone areas;
b. the intermittent stream channel and the area to the top of the inner gorge; and the intermittent stream channel or wetland and the area to the outer edges of the riparian vegetation

Minerals

5. After the timber sale contract has been awarded, and prior to salvage sale activity, timber sale administrators should request the Minerals Administrator review BLM records to determine whether new locatable mining claims have been filed within the project area. If claims have been filed between the date of this report and the award of the contract, the Minerals Administrator will notify mining claimants of pending salvage sale activities in proximity to their mining claims.

Recreation

The following elements would be adopted to minimize the effects of the proposed action on forest visitors. There are no known dispersed recreation sites in the project area, the Deer Creek Forest Camp 2 miles to the southeast on the Boulder-Deer Highway is the nearest developed recreation site.

6. No harvesting, hauling of timber, or moving equipment would occur on the following holiday weekends: Memorial Day, Fourth of July, and Labor Day. The Fourth of July holiday includes, at a minimum, July 3rd through July 5th. For holidays falling on a Monday, this would include the Friday preceding the holiday through Monday. This applies to all treatment types. *The intent is to avoid conflicts between industrial and recreation vehicle traffic on known weekends of high recreation use.*
7. All roads that are re-opened, any created temporary roads, and any pre-existing unauthorized roads used during operations shall be closed immediately after the completion of management actions to minimize the probability of new unauthorized Off-Highway Vehicle routes being established. The exception would be routes that access dispersed campsites that are located within 300 feet of a road open to motorized use on the Motor Vehicle Use Map. These routes will be retained for dispersed campsite access. Closure treatments will use the most effective practicable barriers available on-site. Though it is preferred that closure of these roads would occur within one year of commencing work, it is recognized that in some cases the need to seed or construct closure devices may have to be delayed due to weather or other unforeseeable conditions. In this instance, closure activities will occur as soon as restricting conditions allow and resource impacts due to closure operations could be avoided. The following language will be included in contracts: "To the extent possible, given terrain features, treatments to close unit access roads should camouflage the entrance of the unit access road from existing system roads so they are not obvious and are not accessible by Off-Highway Vehicles." This applies to all treatment types. *The intent is to limit or stop illegal OHV use within treatment areas before they become established.*

Noxious Weeds

8. All heavy equipment that will operate outside of the road prism needs to be cleaned to remove all dirt/mud, plant parts, and debris prior to that equipment entering the National Forest.
9. Seed all skid trails and landings with an approved certified weed free seed mix once operations have been completed.

Range

This allotment is currently being rested for resource benefit as a result of the Stickpin fire. There are two water troughs in the area which are outside the harvest unit boundaries.

Soil

10. On burned soil, ground based equipment should be limited to slopes less than 30%. Short pitches greater than 30% should be limited to less than 100 feet in length. All other equipment should be limited to 40% slopes, short pitches greater than 40% should be limited to less than 100 feet.
    - Applies to timber harvest and fuel reduction activities using mechanical equipment.
    - Applicable Forest Service National BMPs (Veg-4 – Ground-Based Skidding and Yarding, Veg-8 – Mechanical Site Treatment)

11. On burned soils, where feasible, place slash and/or other soil cover so that post-harvest soil cover exceeds 35%. In areas of high risk of soil erosion, place slash or agricultural straw to prevent soil loss. Areas will be identified by sale administrator and soil crew post-harvest.

12. On burned soils, the soil moisture operability guide should be used to determine soil traffic ability.

13. The total acreage of all detrimental soil conditions should not exceed 20% of the total acreage within the activity area including landings and system roads. The desired outcome is to limit detrimental soil conditions to preserve soil productivity and comply with Regional Soil Quality Guidelines and Forest Plan Standards.

    - Applies to all management activities: timber harvest, fuel reduction, and prescribed fire. Applicable Forest Service National BMPs (Veg-1 – Vegetation Management Planning, Veg-4 – Ground-Based Skidding and Yarding Operations, Veg-6 – Landings, Veg-8 – Mechanical Site Treatment)

14. Skid Trail Spacing must be specified in the contract as 100 feet apart edge to edge, except when converging at landings or avoiding obstacles. Forwarder trails must be specified in the contract as 40 feet apart edge to edge except when converging at landings or avoiding obstacles. Four to eight inches of un-compacted slash should cover forwarder trails.
    - Applies to timber harvest and fuel reduction activities. Applicable Forest Service National BMPs (Veg-1 – Vegetation Management Planning, Veg-2 – Erosion Prevention and Control, Veg-4 – Ground-Based Skidding and Yarding, Veg-8 – Mechanical Site Treatment)

15. Skidding equipment must travel on designated trails. When feasible re-use old skid trails. Feller-bunchers should concentrate use on skid trails and should travel in an efficient manner with limited passes off skid trails. The desired outcome is to limit detrimental soil conditions to preserve soil productivity and comply with Regional Soil Quality Guidelines and Forest Plan Standards.

- Applies to timber harvest and fuel reduction activities Applicable Forest Service National BMPs (Veg-1 – Vegetation Management Planning, Veg-2 – Erosion Prevention and Control, Veg-4 – Ground-Based Skidding and Yarding, Veg-8 – Mechanical Site Treatment)

16. Slope limitations for ground based equipment on unburned soil Tractor and skidder yarding would be limited to slopes less than 35%. Short slope lengths may be steeper. Feller bunches, harvester forwarder systems, and other tracked heavy equipment would be limited to slopes less than 40%. Short slopes may be steeper. The desired outcome is to limit detrimental soil conditions to preserve soil productivity and reduce soil erosion potential.
    - Applies to timber harvest and fuel reduction activities using mechanical equipment. Applicable Forest Service National BMPs (Veg-4 – Ground-Based Skidding and Yarding, Veg-8 – Mechanical Site Treatment)

17. Minimize compaction, rutting, and erosion by avoiding activities during wet conditions. Ground based equipment would operate on relatively dry soils of high soil strength or bearing capacity. Rutting exceeding soil quality standards should be remediated. The Field Guide to Soil Moisture Conditions Relative to Operability of Logging Equipment (Rust, 2005) should be used to determine soil trafficability. The desired outcome is to limit detrimental soil conditions and comply with Forest Plan and Regional Soil Quality Standards.
    - Applies to timber harvest and fuel reduction activities using mechanical equipment. Applicable Forest Service National BMPs (Veg-2 – Erosion Prevention and Control, Veg-4 – Ground-Based Skidding and Yarding, Veg-8 – Mechanical Site Treatment)

18. Decompact landings, temporary roads, and main skid trails to restore hydrologic function. Restore soil cover by scarification and seeding or mulching where mechanical treatments removed soil cover. The desired outcome is to restore infiltration, provide soil cover, and stabilize soils to prevent erosion and loss of soil productivity.
    - Applies to all timber harvest activities. Applicable Forest Service National BMPs (Veg-2 – Erosion Prevention and Control, Veg-8 – Mechanical Site Treatment)

19. In units that have had commercial harvest, keep follow up fuel treatment machinery to designated skid trails except for limited passes off designated skid trails. Fuel reduction machinery (i.e., masticators and piling equipment) should be tracked equipment having a ground pressure rating of 8 psi or less and with an articulating arm capable of reaching 15 feet. The desired outcome to prevent detrimental soil conditions and prevent harvest/fuel treatment units from exceeding 20% detrimental soil conditions per Regional and Forest Plan Soil Quality Standards.
    - Applies to fuel reduction and silvicultural activities. Applicable Forest Service National BMPs (Veg-8 – Mechanical Site Treatment).

20. Retain fine and course organic matter on top of the soil. Soil cover should exceed 35%, preferably 50%. The desired outcome is to maintain sufficient amounts of organic matter to prevent short or

long-term nutrient and carbon cycle deficits and to avoid detrimental physical and biological soil conditions. Maintain soil cover amounts to prevent soil erosion. Treatment units should be maintained with between 6 to 20 tons per acre of course woody material (defined as woody material greater than 3 inches in diameter).

- Applies to all timber harvest, fuel reduction, and silvicultural activities.
- Applicable Forest Service National BMPs (Veg-2 – Erosion Control and Prevention, Veg-8 – Mechanical Site Treatment, Fire-2 – Use of Prescribed Fire)

21. Target machine pile size to 10 feet in diameter and 10 feet in height **outside of landings**. The desired outcome is to maintain sufficient amounts of organic matter and to avoid detrimental physical and biological soil conditions. Smaller piles allow for re-colonization by soil organisms and prevent excess tracking from mechanical equipment.
    - Applies to all fuel reduction and silvicultural activities.
    - Applicable Forest Service National BMPs (Veg-2 – Erosion Control and Prevention, Veg-8 – Mechanical Site Treatment, Fire-2 – Use of Prescribed Fire)

Wildlife

22. Design features to retain patches of standing snags have been incorporated into project design.

Heritage

23. If sites are discovered during the course of implementation, a minimum 20-meter buffer would be established by a certified archeologist. Personnel must notify the forest archeologist if there is an inadvertent discovery of archeological resources within a unit boundary. In such an instance, operations are to cease until a certified archeologist can develop mitigations. All equipment must stay out of the known boundaries of sites. Trees will be felled away from the interior boundaries of cultural properties. The Forest Archeologist or qualified Heritage Program personnel will work with presale and fuels personnel to identify sites located within unit boundaries and provide location information to appropriate individuals.

Transportation

24. Standard post-haul maintenance will be completed on open roads used for project implementation. Currently closed roads used for project implementation will remain closed after implementation is complete.

Reasons for Categorical Exclusion

Routine administrative, maintenance, and other actions normally do not individually or cumulatively have a significant effect on the quality of the human environment and, therefore, may be categorically excluded from documentation in an Environmental Impact Statement (EIS) or Environmental Assessment (EA) unless scoping indicates extraordinary circumstances exist (FSH 1909.15, 31.12). There were no scoping response for this project. This project is consistent with Category 13 of FSH 1909.15, *Salvage of dead and/or dying trees not to exceed 250 acres, requiring no more than ½ mile of temporary road construction. The proposed action may include incidental removal of live or dead trees for landings, skid trails, and road clearing* (36 CFR 220.6(e)(13).

Interdisciplinary review of this project determined that no extraordinary circumstances exist that would require these proposed actions to be documented with an EA or EIS. The following circumstances were specifically reviewed for effect:

Federally listed threatened or endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or Forest Service sensitive species: The Second Creek Project will have no measurable, adverse effect to any federally listed or proposed threatened or endangered plants or animals, it will not lead in a trend towards federal listing or loss of viability to Forest Service Sensitive Species (List dated July 13, 2015), and will not decrease habitat sufficiently to threaten the viability of Management Indicator Species (as listed in the Colville National Forest Plan). The following bullets discuss the Forest Service Sensitive Species that the project may affect. There are no Threatened, Endangered or sensitive plant sites within the project area, no effects to TES plants are expected.

- **Grizzly Bears (USFWS Threatened or Endangered)**: Because no elements of bear habitat (secluded habitats, travel corridors, hiding cover, forage) would be affected the project would have no effect to grizzly bears.
- **Canada Lynx (USFWS Threatened or Endangered)**: Because the proposed project will have an inconsequential effect to future denning habitat and foraging habitat, it will have no effect to lynx.
- **Gray Wolf (FS Sensitive Species)**: Because secluded habitat would not be affected, cattle numbers would not change in the long term, and denning and rendezvous sites would not be affected, the project would have no impact to wolves.
- **Wolverine (FS Sensitive Species)**: Because the proposed project does not change successional stages, maintains travel corridors, does not affect big game populations and does not affect natal den sites, it will have no impact to wolverines.
- **Townsend's (Pacific western) big-eared bat (FS Sensitive Species) and little brown myotis bat (FS Sensitive Species)**: The proposed project would have no impact on Townsend's big-eared or Little brown myotis bats due to the loss of portions of snags over the 188 acres of units, or the opening of these areas to provide better foraging conditions for bats.
- **Northern Goshawk (FS Sensitive Species)**: The proposed project would remove dead and dying trees, none of which goshawks would use for nesting. The project would create small openings that goshawk might fly through while foraging, but which would not affect the birds. Because of this, the proposed project would not impact goshawks.
- **Great Gray Owl (FS Sensitive Species)**: The proposed project would have no impact to great gray owl populations because potential nest trees would be retained and openings to improve foraging are very small.
- **White-headed Woodpecker (FS Sensitive Species) and Lewis' Woodpecker (FS Sensitive Species)**: The proposed project would retain most large snags, and would retain at least 10% of the snags overall. The Stickpin fire created at least 49,000 acres of snag habitat, so the amount of snags lost would be inconsequential. The proposed project would create small openings across the project area, which would have a very small, positive effect to habitat for both species, but too small to measure effects to populations of either species. The Stickpin fire burned through all units,

eliminating any shrub cover. Some shrub species have begun to regrow. The proposed project would smash this new growth, but most of the project would be completed before the main growing period in late spring and early summer, thus long-term shrub regrowth would not be negatively affected. The proposed project, when combined with the concurrent project, would affect less than 1% of the snag habitat created by the Stickpin fire. Therefore, the project would have no impact to either species.

- **Western Bumble Bee (FS Sensitive Species)**: The proposed project would have no impact to Western bumble bee populations, though it does have a very slight positive effect to western bumble bee habitat by increasing slash and by creating openings in which flowers could grow.
- **Big Game (CNF Management Indicator Species):** The proposed harvest would cause a temporary decrease in forage for big game because equipment would smash the new shrub growth that occurred post-fire. The temporary loss compared to the total produced as a result of the fire is inconsequential to big game. Over a longer time, the proposed removal of trees would allow for more light to reach the forest floor, which results in an increase in browse. The proposed project would occur along existing, open roads so the road density would not change. The project will not affect viability of white-tailed or mule deer in the project area because the proposed project would have inconsequential effects to big game.
- **American three-toed woodpecker, Pileated woodpecker, primary cavity excavators (CNF Management Indicator Species):** The proposed project, when combined with the concurrent project, would affect less than 1% of the snag habitat created by the Stickpin fire. Therefore, the project would not affect the viability of American three-toed woodpeckers, pileated woodpeckers, or other primary cavity excavators.
- **Barred owl, dusky (blue) grouse, spruce (Franklin's grouse), large raptors (CNF Management Indicator Species):** The Stickpin fire burned through these habitats in the proposed project area, so habitat for these species does not occur in the proposed units, and the project will not affect these species or their viability.

***Flood plains, wetlands, or municipal watersheds*:** The project will not adversely affect flood plains, wetlands, or municipal watersheds because there are no mapped wetlands, floodplains, or municipal watersheds in the project area. This project complies with the Safe Drinking Water Act.

Congressionally designated areas, such as wilderness, wilderness study areas, or National Recreation Areas: The project does not occur in any congressionally designated areas.

Inventoried roadless areas or potential wilderness areas: The project does not occur in any inventoried roadless or potential wilderness area.

***Research Natural Areas*:** The project does not occur in any Research Natural Areas.

***American Indians and Alaska Native religious, traditional cultural properties or sacred sites*:** A Heritage Resource Review was completed and no known religious, traditional cultural properties or sacred sites located within or adjacent to the project area. There will be no effect to American Indians and Alaska Native religious, traditional cultural properties or sacred sites.

***Archaeological sites, historic properties, or areas*:** A Heritage Resource Review was completed and no known archaeological sites or historic properties are located within the project area. There will be no Historic Properties effected by this project.

Public Involvement

Field trips were held on April 21, 2016; and June 15, 2016 which included representatives from the Colville National Forest, Vaagen Bros. USFS Pacific Northwest Research Station, Univeristy of Washington, Lumber Inc., Boise Cascade, Stimson Lumber, and the Northeast Washington Forestry Coalition. The project was discussed at the Northeast Washington Forestry Coalition Meeting on May 19, 2016. A public scoping letter was mailed on June 17, 2016 to Ferry, Stevens, and Pend Oreille County Commissioners as well as the Northeast Washington Forestry Coalition. No responses were received. Tribal Consultation letters were sent to the Confederated Tribes of the Colville Reservation, the Spokane Tribe, and the Kalispel Tribe on June 17, 2016. No responses were received. This project was published in the Schedule of Proposed Actions on June 21, 2016. The Forest Service considered input from these groups when drafting this proposal.

Compliance with Existing Management Direction

As proposed, the project is consistent with the *Colville National Forest Land and Resource Management Plan* (Forest Plan). The project will occur within MA5 Scenic/Timber, and MA7 Wood/Forage. Most of unit 4 falls within MA5, partial retention, timber harvest is allowed with aim to revegetate disturbed areas to the extent compatible with the surrounding area (LRMP 4-94).

The project is also consistent with all laws affecting National Forest management. These laws include the National Forest Management Act, the Endangered Species Act, the Clean Water Act, and the National Historic Preservation Act.

Administrative Review

This decision is not subject to appeal pursuant to 36 CFR 218.23 and may be implemented on the date of decision by the responsible official.

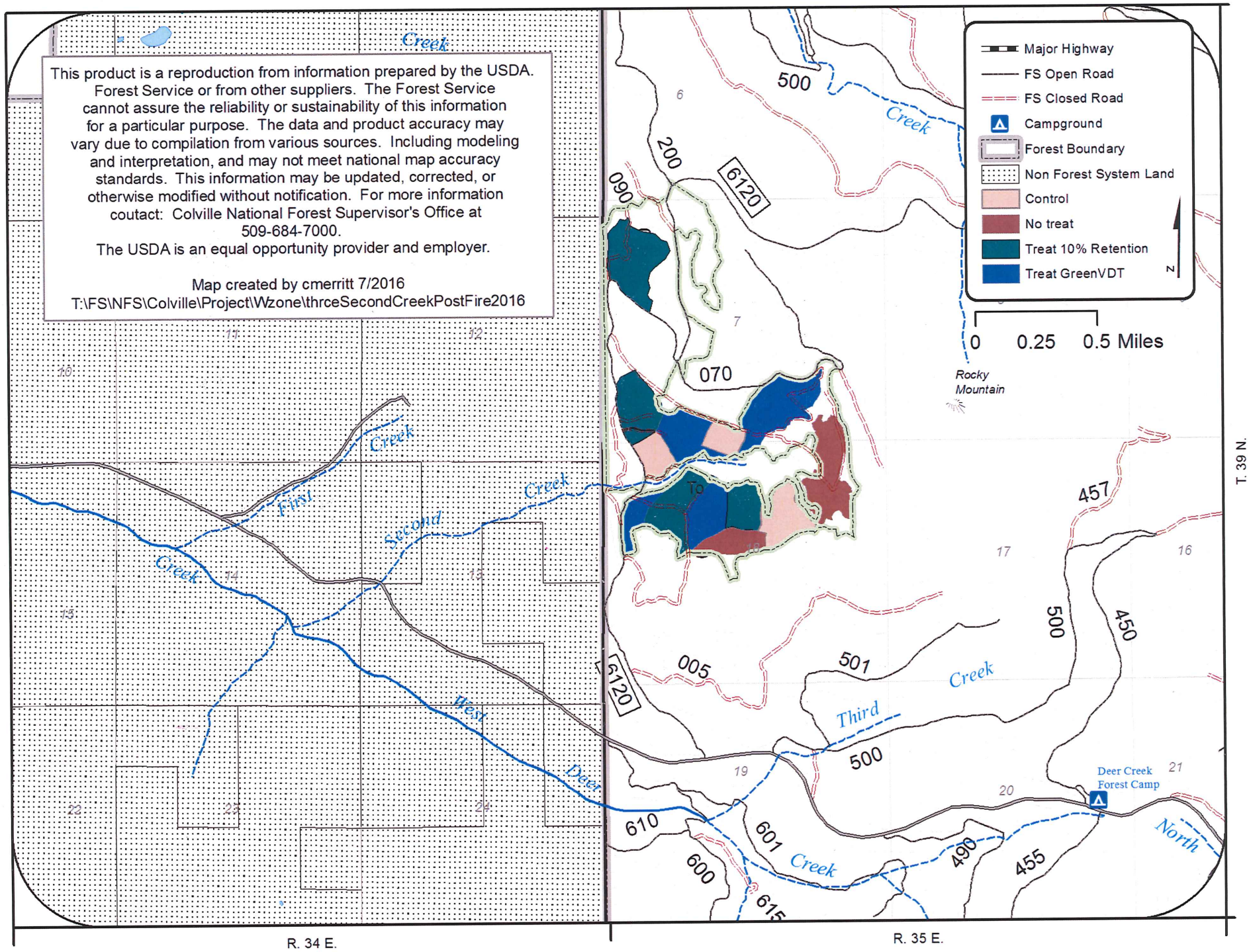
Implementation and Contact Person

The responsible official may implement this project on the date of decision. It is expected that this project would be implemented in 2016.

For further information, contact the project team leader Christy Merritt at the Three Rivers Ranger District, 255 West 11th, Kettle Falls, Washington, 99141, or telephone (509) 738-7737, or email christymerritt@fs.fed.us.

Joshua P. White

JOSHUA P. WHITE
District Ranger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Map created by cmerritt 7/2016
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Major Highway
FS Open Road
FS Closed Road
Campground
Forest Boundary
Non Forest System Land
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Rocky Mountain
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